

Remarks/Arguments:

Claims 1-4 have been rejected under 35 U.S.C. §102(e) as being anticipated by Nakajima (US 5,989,940). It is respectfully submitted, however, that these claims are patentable over the art of record for the reasons set forth below.

Nakajima, Figures 2 and 4 disclose flip chip 11. Flip chip 11 is in contact with dielectric material 15a. Furthermore, in Fig. 4, thermally conductive planar member 20 is above flip chip 21. Substrate 12 is also included. Substrate 12 includes electrical contact 122a. As set forth at column 4, lines 46-49:

Inside the resin substrate 121, a device hole is defined so as to mount the semiconductor element 11 within the device hole in a manner to be described later, as illustrated in Fig. 2(A).

Applicant's claimed invention differs from Nakajima. Applicant's Fig. 1 discloses flip chip 12 situated above substrate 16. Thermally conductive planar member 22 is above flip chip 12. Dielectric material 26 surrounds the edge surfaces of flip chip 12, planar member 24, and is also in contact with a portion of the substrate member.

Applicant's invention, as recited by claim 1, thus includes a feature which is neither disclosed nor suggested by the art of record, namely:

. . . curing said moldable dielectric material. . . so that said moldable dielectric material is prevented from extending below said substrate member.

This feature is supported by the originally filed application at page 9, lines 3-8 where it is stated:

A portion of the substrate member 16, i.e., the immediate area surrounding the mounted flip chip 12, cooperates with other predefined surfaces of the mold cavity to form a substantially closed cavity.

Thus, the mold need be applied to only one side of Applicant's substrate. This is different from the art of record where the mold need be applied from both sides of the substrate.

It is because Applicant do not provide a device hole that the mold can be applied from only one side of the substrate. By contrast, and the prior art, the mold is applied from both sides of the substrate, thus leading to a more complex manufacturing process.

For this reason, claim 1 is patentable over the art of record.

Claims 2-4 include the features of claim 1 from which they depend. Thus, claims 2-4 are also patentable over the art of record.

In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance which action is respectfully requested.

Respectfully submitted,



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Dated: November 18, 2004

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The Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. **09-0457 (IBM Corporation)** of any fees associated with this communication.

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